DISASTER PLANNING

How Can I Prepare My Animal-Research Lab for an Earthquake?

Reader Question: I am new to California and recently felt the ground shake for the first time. My colleagues seem to take it lightly and say I shouldn't be concerned about mild tremors, but I think I should have my animal-research lab prepared for the possibility of a serious earthquake. How do I go about that?

Expert Comments:

In California and other areas at risk, earthquake preparedness is a key component of safety training. The PI is responsible for ensuring that all laboratory staff members are adequately trained to protect themselves and the animals in their care.

A disaster plan, directed by the attending veterinarian, should be in place, covering proper food storage, electrical system backup and other preparations to safeguard animals in the aftermath of an earthquake. The plan should address what happens once buildings can be re-entered or in situations when they cannot be safely re-entered.

There must be clear instructions on how to humanely secure animals undergoing procedures when an evacuation becomes necessary. For example, no laboratory animal should leave the building in an evacuation. Animals should always be returned to their cages unless there is an immediate threat to human safety.

If an animal is undergoing surgery when an evacuation becomes necessary, good judgment must be used in deciding how to safely end the procedure or whether euthanasia is necessary. Semi-annual Institutional Animal Care and Use Committee (IACUC) inspections of laboratory spaces where animal studies occur can help identify specific safety issues and recommend procedures.

Those procedures might include a sign-in sheet for after-hours work, which could help security and rescue personnel quickly locate people and the animals in their charge after an earthquake.

Numerous resources are available in print and online to assist PIs and their institutions prepare for disasters. For example, the journal of the Institute for Laboratory Animal Research (ILAR) devoted an
The Office Of Laboratory Animal Welfare (OLAW) Web site has a section on "Disaster Planning and Response Resources." (http://grants.nih.gov/grants/olaw/disaster_planning.htm) It includes a commentary entitled "Lessons Learned," based on Public Health Service veterinarians’ involvement in efforts to rescue laboratory animals after Hurricanes Katrina and Rita in September 2005. OLAW says the objective was to "extrapolate from these lessons and provide general information for institutions that hold PHS Animal Welfare Assurances as they prepare for disasters" (including earthquakes).

Because they are responsible for safety training, PIs must make sure every laboratory staff member knows the appropriate immediate responses in the event of an earthquake (even though these might seem obvious or intuitive), such as ducking under the nearest sturdy object, covering the head and neck and avoiding windows and heavy objects that could fall or shatter.

In earthquake-prone areas, the PI should ensure that his or her laboratory aisles are wide enough to provide ease of passage, that there is unobstructed access to exits and fire extinguishers, that cabinets and bookshelves taller than 4 feet are anchored, that compressed gas cylinders are secured, and that flammables are kept in a fire-safe cabinet or other storage unit.

In addition, posting emergency and hazard information in a highly visible place, along with PI and lab-manager contact information, is recommended — one of the "lessons learned" after the Katrina and Rita hurricane disasters, according to OLAW.

On the UC-Berkeley campus, the Office of Laboratory Animal Care, the Office of Environmental Health and Safety and the IACUC coordinate to provide PIs all necessary training resources and requirements. PIs in other locations should maintain regular communication with their compliance and safety officials to ensure disaster preparedness.

Comments by Kelly Jensen, DVM, third-year resident in laboratory animal medicine, and others at the University of California-Berkeley Office of Laboratory Animal Care.

Some information provided by the Office of Laboratory Animal Welfare (OLAW) and the journal of the Institute for Laboratory Animal Research (ILAR).

To view the full article with reader comments, please visit: http://principalinvestigators.org/no-8-disaster-planning-how-can-i-prepare-my-animal-research-lab-for-an-earthquake-html/